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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,883	04/10/2001	Scott A. Rawson	IR-2819(MF)	8545

7590 05/28/2004  
Edward F Murphy III  
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Post Office Box 8012  
Cary, NC 27512-8012

EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/829,883

Applicant(s)

RAWSON, SCOTT A.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,10-13,17,18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2 10-13 17-18 20-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 10-13, 17-18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nowak et al (US 5116030) in view of Kubaugh (US 2367830).

Nowak et al discloses a vibration isolation member including: an inner member 34 having a frustoconical seat having an angled surface and an outer periphery diameter D', an outer member 55 having a planar base defining a base plane and a shroud that extends away from the planar base and said planar base plane, the shroud extending to overlay the inner member, the shroud having an angled segment with an inner surface, the angled segment inner surface oriented substantially parallel to the angled surface of the frustoconical seat, the shroud defining an inner periphery diameter D", the inner member not extending through the outer member base plane, a single resilient member 20 constrained between the shroud angled segment inner surface and the inner member frustoconical seat angled surface, the single resilient member having a substantially trapezoidal cross section, the single resilient member bonded to the shroud angled segment inner surface and the inner member frustoconical seat angled

surface provides for displacement of the inner member in a radial direction and in an axial direction from the outer member. Nowak et al lack the frustoconical seat outer periphery diameter D' being larger than the inner periphery diameter D" of the shroud member, thereby providing an interference with the shroud inner peripheral diameter D" to prevent separation of the vibration isolation member in the event of failure of the single resilient member. Kubaugh teaches the extension of a shroud member such that an inner periphery of the shroud is smaller than the outer periphery of an inner member so that the two parts will not completely separate if the resilient member fails (column 1, lines 18-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of Nowak to provide an interference as taught by Kubaugh to prevent full separation of the two members, thereby increasing the safety of the device. Nowak et al further lack the single sole resilient member being the sole resilient member providing for isolation between the suspended body and the support structure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to eliminate the second resilient member of Nowak et al should the additional support not be necessary or desired (for example, providing vibration isolation to light weight devices). Also note *In re Larson*, 340 F.2d 965, 144 USPQ 347 (CCPA 1965)

Claims 1-2, 10-13, 17-18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saurer (US# 2538658) in view of Nowak et al (US# 5116030).

Sauer discloses a vibration isolator including: (a) an inner member 2 for attachment to a suspended body, said inner member comprising a seat having an outer

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periphery diameter  $D'$ ; (b) an outer member for attachment to a planar support structure 8, said outer member comprising a planar base defining a base plane and a shroud 1 that extends away from the planar base and said base plane, the shroud extending to overlay the inner member outer periphery diameter  $D'$ , said shroud having an angled segment with an inner surface, said shroud defining an inner periphery diameter  $D''$ , said inner periphery diameter  $D''$  less than said outer periphery diameter  $D'$ , said inner member not extending through said outer member base plane; and (c) consisting essentially of a single sole resilient member 3 constrained between the shroud angled segment inner surface and the inner member seat surface, said single resilient member having a cross section, said single resilient member bonded to said shroud angled segment inner surface and said inner member seat surface, wherein said seat outer periphery diameter  $D'$  providing an interference with said shroud inner periphery diameter  $D''$  to prevent a separation of the vibration isolation member in the event of a failure of said single resilient member, wherein said single sole resilient member is the sole resilient member providing for isolation between the suspended body and the support structure. Saurer lack a frustoconical shaped seat and the explicit disclosure of iso elastic stiffness of the device. Nowak et al teach a similar isolator including the use of a frustoconical seat and the selection of the shroud and frustoconical seat angles to provide iso elastic stiffness in the mount. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an angled seat and select the angles of the shroud and seat as taught by Nowak et al in the isolator of Saurer to

provide isoelastic characteristics to the mount, thereby allowing uniform damping characteristics regardless of the direction of the load.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

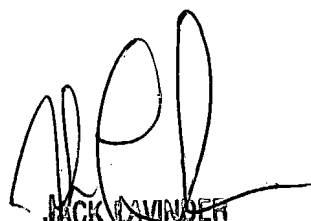
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

  
JACK LAVINDER  
SUPERVISORY PATENT EXAMINER  
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